

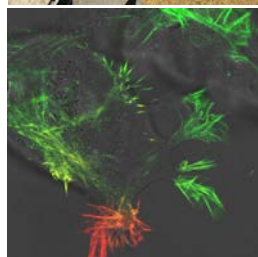
Bern, April 15, 2020

Annual LS2 meeting

On February 13 - 14, 2020, Life Sciences Switzerland (LS2, <https://www.ls2.ch/>) held its annual meeting jointly organized with the German Society for Biochemistry and Molecular Biology (GBM) and the Austrian Association of Molecular Life Sciences and Biotechnology (ÖGMBT) at the University of Zürich. The two day program was entitled "Cells, Molecules & Organisms" and brought together scientists from various countries and disciplines. The new LS2 intersections "[Microscopy](#)" and "[Bioinformatics](#)" organized the scientific symposium "**Smart Microscopy: Machine Learning applied to Life Sciences**", chaired by Sara Mitri, University of Lausanne and Swiss Institute of Bioinformatics, and Oliver Biehlmaier, Biocenter, University of Basel. Among the speakers, Henning Stahlberg (University of Basel) elaborated on the application of cryo-electron microscopy to investigate neurodegeneration, while Tobias Sing (Novartis, Basel) introduced a deep learning-based model of normal histology. In addition to the outstanding scientific program, the industry exhibition and lively discussions provided many opportunities to network with fellow colleagues. From the MIC, Yury Belyaev participated at this event. Next year's LS2 annual meeting is scheduled in Geneva for the 18-19 of February 2021.

Study Trip of the PhD Students from the Cutting Edge Microscopy (CEM) program

(written by Alexander Ernst, students representative)



Top: Group foto.

Left: Example image, photoconversion. Laser excitation induced fluorescence shift from green to red of LifeAct-Dendra2. Practical with Marcus Thelen.

On February 6 – 7, 2020, we, the Cutting Edge Microscopy students, made a study excursion to the [Institute for Research in Biomedicine](#) (IRB) in Bellinzona. The group of PhD students from the TKI, DBMR, ARTORG, IZB, and Anatomy together with Yury Belyaev, Ruth Lyck and Fabian Blank received a fascinating lecture on advanced microscopic and image analysis methods. Marcus Thelen (group leader) and Diego Morone (imaging facility staff) gave us an insight into their work with tissue clearing, 3D Printing, protein labelling, calcium-imaging, high content screening, machine learning and deep learning. After the theoretical input, we got the opportunity of direct hands-on sessions on photo-conversion, image analysis and calcium imaging. The experienced researchers and facility staff of the IRB impressively showed how a well-coordinated machinery of imaging facility and research groups achieve robust quantitative data, answering highly complex biological questions.

Booking system for microscopes – Open Iris replaces MICBOOK

MIC instruments and their add-on devices are now available for booking in [Open IRIS](#) (OI). Administrators can exchange questions and answers in a separate MIC forum on [Ilias](#) or ask the MIC team for advice. If you are an instrument user, please contact the instrument administrator for help. Important information for instrument administrators: **MICBOOK will be finally closed for administrators on May 7, 2020.** If you haven't exported booking information, please do this now.

Scientific Highlights

We offer publications of your recent research highlights with strong connections to microscopy (eg. publications or grant approvals) in our MIC Newsletters. Please submit a short summary to the MIC team at office@mic.unibe.ch.

Call for communication of events and presentations

The MIC aims to improve collaborations between researchers at the University of Bern. Please announce presentations of team members or guests to the [MIC coordinator](#) for publication on the MIC homepage and the MIC Newsletter!

Nacht der Forschung 2020

Due to the Covid-19 crisis the event "Nacht der Forschung 2020" has been **postponed for one year**. It will take place in 2021. The MIC team thanks all colleagues who kindly volunteered to contribute.

Temporary cost-free software licences

Currently, various companies offer time-limited free software licenses. MIC does not intend to advertise! We decided to list these offers, because the software may be useful for students working at home due to Covid-19.

- Leica offers a 90-day license of LAS X Offline Software Suite. Link [here](#).
- Zeiss offers a 90-day license of ZEN (blue edition) or ZEN core. Link [here](#).
- Scientific Volume Imaging offers temporary Huygens license (Huygens@Home). Link [here](#). The **MIC** HRM deconvolution server is running as usual and accessible [here](#). Please make sure that you are using [VPN](#). Latest HRM user manual you can find [here](#).

Highlights and important dates of the MIC in 2020

MIC commission meetings:	May 14, 2020 August 27, 2020 December 10, 2020
MIC Research Day:	July 8, 2020
MIC Summer School:	July 8 – 10, 2020
Swiss Core Facility Day	September 2, 2020
MIC Symposium:	November 27, 2020 Subject 2020: 3D Electron Microscopy

MIC Presentations, Trainings, Workshops, Demonstrations – upcoming events at the University of Bern

Online courses and resources

Due to the Covid-19 crisis, which has caused a lock-out situation and a cancellation of lectures, the MIC team has collected [online courses and resources](#) to bypass this gap in learning. The overview document with many useful links is accessible [here](#).



April 21, 2020

MIC Training: Imaris: Basics and advanced. This course will run **online**. We can still accommodate a few participants. Please send e-mail to Yury.Belyaev@mic.unibe.ch. More information [here](#).

April 29, 2020 – course postponed due to Covid-19!

MIC Training: Fundamentals of wide field microscopy, more information [here](#).

May 4, 2020, from 1.30 to 3.00 pm.

Online demonstration: Photometrics camera technology. Limited spaces available. Please book your participation in advance by contacting Yury Belyaev (Yury.Belyaev@mic.unibe.ch). More information [here](#).

May 11, 2020

Workshop: Conventional fluorescence microscopy, laser scanning microscopy and digital image processing. More information [here](#).

September 9, 2020

MIC Training: Fundamentals of confocal microscopy, more information [here](#).

October 12, 2020

Workshop: Advanced Histology and immunolabeling for paraffin and cryo-embedding and nonembedded cell cultures. More information [here](#).

**Trainings, Workshops, Demonstrations
– further events in Switzerland and abroad****May 31 – June 5, 2020**, Prague, Czech Republic – **postponed** due to Covid-19

EMBO Practical Course: Super-resolution in Light Microscopy. More information [here](#).

June 15 – 17, 2020, Bern – **postponed** due to Covid-19

MMB 2020: 10th International Conference on Microtechnologies in Medicine and Biology (MMB). More information [here](#).

June 23 – 24, 2020, Bergisch Gladbach, Germany.

European UltraMicroscope User Meeting 2020: A platform to exchange information, experiences, and recent findings in the field of light sheet microscopy, organized by Miltenyi Biotec B.V. For further information contact umusermeeting@miltenyibiotec.de.

June 29 – July 3, 2020, Lausanne, Switzerland.

ZIDAS 2020: switZerland's Image and Data Analysis School. More information [here](#).

August 23 – 28, 2020, Copenhagen, Denmark

EMC 2020: The European Microscopy Congress (EMC) is held every four years under the auspices of the European Microscopy Society, and the International Federation of Societies for Microscopy. More information [here](#).

August 31 – September 11, 2020, Zurich, Switzerland

EXCITE Summer School 2020: 14th Zürich Summer School on Biomedical Imaging. More information [here](#).

October 3 – 9, 2020, Heidelberg, Germany

EMBO practical course: Advanced Methods in Bioimage Analysis. More information [here](#).

Previous MIC newsletters are available to download [here](#).

